REMARKS

By way of this Preliminary Amendment, claims 15-18 and 20-23 are pending. Claims 1-14 and 19 have been cancelled. Claims 15-18 and 20 have been amended, and claims 21-23 have been added. These claim amendments, cancellations, and additions are being made solely for purposes of filing this continuing application. Applicants submit that these claims are supported by the application as filed. Additionally, the specification is being amended to acknowledge priority of this continuing application to U.S.S.N. 10/149,921.

CONCLUSION

Applicants believe that the subject matter of the pending claims is patentable and that the instant application should accordingly be allowed. If the Examiner believes that a conversation with Applicants' attorney would be helpful in expediting prosecution of this application, the Examiner is invited to call the undersigned attorney at (203) 812-6450.

Respectfully submitted,

Dated: December 4, 2003

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Cont. Appl. of U.S.S.N.,10/149,921

Amendment to Specification for Attorney Docket Number LeA 34 125C1

Please add to the first page of the specification, following the title, the paragraph shown below:

This application is a divisional application of U.S.S.N. 10/149,921, filed October 21, 2002.

Amended Claims for Attorney Docket Number LeA 34 125C1

- 1. (Cancelled).
- 2. (Cancelled).
- 3. (Cancelled).
- 4. (Cancelled).
- 5. (Cancelled).
- 6. (Cancelled).
- 7. (Cancelled).
- 8. (Cancelled).
- 9. (Cancelled).
- 10. (Cancelled).
- 11. (Cancelled).
- 12. (Cancelled).
- 13. (Cancelled).
- 14. (Cancelled).
- 15. (Currently amended) The use as claimed in claim 14 for producing a medicament or a pharmaceutical composition A method for the prophylaxis and/or treatment of diseases which are connected to cGMP-regulated processes (cGMP-related diseases) comprising administering to a subject in need of such treatment an effective amount of a compound of the formula (I)

in which

- R¹ represents straight-chain or branched alkyl having up to 6 carbon atoms or represents (C₃-C₈)-cycloalkyl,
- R² represents hydrogen or represents straight-chain or branched alkyl having up to 6 carbon atoms.

R³ and R⁴ are identical or different and represent hydrogen or (C₁-C₆)-alkoxy or represent (C₁-C₆)-alkyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl, (C₁-C₅)-alkoxy or phenoxy or by radicals of the formulae

$$-0$$
-CO-NR⁵R⁶, $-NR^7R^8$ or

in which

 R^5 , R^6 , R^7 and R^8 are identical or different and denote hydrogen, (C_1 - C_6)-alkyl or phenyl, or

R⁷ and R⁸, together with the nitrogen atom to which they are bonded, form a 5- to 6membered, saturated heterocycle which can additionally contain a further heteroatom from the series S and O,

and/or (C_1-C_6) -alkyl is, for its part, optionally substituted by phenyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl, (C_1-C_6) -alkoxy or halogen or by (C_1-C_6) -alkyl which, for its part, is in turn substituted by hydroxyl or (C_1-C_6) -alkoxy, or phenyl is optionally substituted by radicals of the formulae $-SO_2-NR^9R^{10}$ or $-NR^{11}R^{12}$,

in which

 R^9 , R^{10} , R^{11} and R^{12} are identical or different and denote hydrogen, (C_1 - C_6)-alkyl or phenyl,

<u>or</u>

R¹¹ and R¹², together with the nitrogen atom to which they are bonded, form a 5- to 6membered, saturated heterocycle which can additionally contain a further heteroatom from the series S and O,

 $\begin{array}{ccc} \underline{\text{or}} & & \underline{\text{represents hydrogen or } (C_1\text{-}C_6)\text{-alkyl},} \\ \\ \underline{\text{and}} & & \underline{\text{represents radicals of the formula}} \end{array}$

<u>or</u>

represents phenyl which is optionally substituted, up to 3 times, identically or differently, by halogen, (C_1-C_6) -alkoxy or hydroxyl or by a radical of the formula

or by (C₁-C₆)-alkyl which, for its part, can be substituted by hydroxyl or (C₁-C₆)-alkoxy,

<u>or</u>

R³ and R⁴, together with the nitrogen atom to which they are bonded, form a radical of the formula

$$-N$$
 $N-R^{13}$ $-N$ R^{16} R^{15} $-N$ 0

in which

R¹³ denotes hydrogen, (C_1-C_6) -alkoxycarbonyl, (C_3-C_6) -cycloalkyl, pyridyl, pyrimidyl or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl,

 R^{14} and R^{15} are identical or different and denote hydrogen, hydroxyl or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl or by a radical of the formula – $P(O)(OR^{18})(OR^{19})$,

4) --

in which

R¹⁸ and R¹⁹ are identical or different and denote hydrogen or (C₁-C₆)-alkyl,

<u>or</u>

R¹⁴ and R¹⁵ together form a radical of the formula =N-OH,

 R^{16} and R^{17} are identical or different and denote hydrogen or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl,

and the salts, N-oxides and isomeric forms thereof.

- 16. (Currently amended) The use as claimed in claim 14 or 15 for producing a medicament or apharmaceutical composition for the prophylaxis and/or treatment of The method of claim 15 wherein the cGMP-related diseases is selected from the group consisting of cardiovascular diseases, diseases of the urogenital system and cerebrovascular diseases.
- 17. (Currently amended) The use as claimed in one of claims 14 to 16 for producing a medicament or a pharmaceutical composition. A method for the prophylaxis and/or treatment of cardiovascular diseases such as selected from the group consisting of high blood pressure, neuronal hypertension, stable and unstabile angina, peripheral and cardiac vascular diseases, arrhythmias, thromboembolic diseases, and ischemias such as myocardial infarction, stroke, transistory and ischemic attacks, angina pectoris, peripheral circulatory disturbances, prevention of restenoses following thrombolysis therapy, percutaneous transluminal angioplasty (PTA), percutaneous transluminal coronary angioplasties (PTCA) and bypass comprising administering to a subject in need of such treatment an effective amount of a compound of the formula (I)

in which

R¹ represents straight-chain or branched alkyl having up to 6 carbon atoms or

represents (C₃-C₈)-cycloalkyl,

- R² represents hydrogen or represents straight-chain or branched alkyl having up to 6 carbon atoms,
- R³ and R⁴ are identical or different and represent hydrogen or (C₁-C₆)-alkoxy or represent (C₁-C₆)-alkyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl, (C₁-C₅)-alkoxy or phenoxy or by radicals of the formulae

$$-\text{O-CO-NR}^5\text{R}^6$$
, $-\text{NR}^7\text{R}^8$ or

in which

 R^5 , R^6 , R^7 and R^8 are identical or different and denote hydrogen, (C_1 - C_6)-alkyl or phenyl, or

R⁷ and R⁸, together with the nitrogen atom to which they are bonded, form a 5- to 6membered, saturated heterocycle which can additionally contain a further heteroatom from the series S and O,

and/or (C_1-C_6) -alkyl is, for its part, optionally substituted by phenyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl, (C_1-C_6) -alkoxy or halogen or by (C_1-C_6) -alkyl which, for its part, is in turn substituted by hydroxyl or (C_1-C_6) -alkoxy, or phenyl is optionally substituted by radicals of the formulae $-SO_2-NR^9R^{10}$ or $-NR^{11}R^{12}$,

in which

 R^9 , R^{10} , R^{11} and R^{12} are identical or different and denote hydrogen, (C_1 - C_6)-alkyl or phenyl,

<u>or</u>

R¹¹ and R¹², together with the nitrogen atom to which they are bonded, form a 5- to 6membered, saturated heterocycle which can additionally contain a further heteroatom from the series S and O,

R ³	represents hydro	ogen or (C ₁ -C ₆)-alkyl,	
<u>and</u>			
<u>R</u> ⁴	represents radicals of the formula		
0,50	, \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	$O \longrightarrow N$ or	O S S O

<u>or</u>

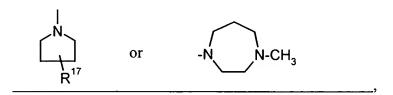
represents phenyl which is optionally substituted, up to 3 times, identically or differently, by halogen, (C₁-C₆)-alkoxy or hydroxyl or by a radical of the formula

or by (C₁-C₆)-alkyl which, for its part, can be substituted by hydroxyl or (C₁-C₆)-alkoxy,

<u>or</u>

R³ and R⁴, together with the nitrogen atom to which they are bonded, form a radical of the formula

$$-N$$
 $N-R^{13}$ $-N$ R^{16} R^{15} $-N$ $-N$



in which

R¹³ denotes hydrogen, (C_1-C_6) -alkoxycarbonyl, (C_3-C_6) -cycloalkyl, pyridyl, pyrimidyl or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl,

 R^{14} and R^{15} are identical or different and denote hydrogen, hydroxyl or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl or by a radical of the formula – $P(O)(OR^{18})(OR^{19})$,

in which

R¹⁸ and R¹⁹ are identical or different and denote hydrogen or (C₁-C₆)-alkyl,

<u>or</u>

R¹⁴ and R¹⁵ together form a radical of the formula =N-OH,

 R^{16} and R^{17} are identical or different and denote hydrogen or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl,

and the salts, N-oxides and isomeric forms thereof.

18. (Currently amended) The use as claimed in one of claims 14 to 16 for producing a medicament or a pharmaceutical composition A method for the prophylaxis and/or treatment of cerebrovascular diseases such as selected from the group consisting of cerebral ischemia, stroke, reperfusion damage, brain trauma, edemas, cerebral thrombosis, dementia and Alzheimer's disease comprising administering to a subject in need of such treatment an effective amount of a compound of the formula (I)

in which

- R¹ represents straight-chain or branched alkyl having up to 6 carbon atoms or represents (C₃-C₈)-cycloalkyl,
- R² represents hydrogen or represents straight-chain or branched alkyl having up to 6 carbon atoms,

 R^3 and R^4 are identical or different and represent hydrogen or (C_1-C_6) -alkoxy or represent (C_1-C_6) -alkyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl, (C_1-C_5) -alkoxy or phenoxy or by radicals of the formulae

$$-\text{O-CO-NR}^5\text{R}^6$$
, $-\text{NR}^7\text{R}^8$ or

in which

 R^5 , R^6 , R^7 and R^8 are identical or different and denote hydrogen, (C_1 - C_6)-alkyl or phenyl, or

R⁷ and R⁸, together with the nitrogen atom to which they are bonded, form a 5- to 6membered, saturated heterocycle which can additionally contain a further heteroatom from the series S and O,

and/or (C_1-C_6) -alkyl is, for its part, optionally substituted by phenyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl, (C_1-C_6) -alkoxy or halogen or by (C_1-C_6) -alkyl which, for its part, is in turn substituted by hydroxyl or (C_1-C_6) -alkoxy, or phenyl is optionally substituted by radicals of the formulae -SO₂-NR⁹R¹⁰ or -NR¹¹R¹²,

in which

R⁹, R¹⁰, R¹¹ and R¹² are identical or different and denote hydrogen, (C₁-C₆)-alkyl or phenyl,

<u>or</u>

R¹¹ and R¹², together with the nitrogen atom to which they are bonded, form a 5- to 6membered, saturated heterocycle which can additionally contain a further heteroatom from the series S and O,

 $\frac{\text{or}}{\text{R}^3}$ represents hydrogen or (C_1-C_6) -alkyl, and $\frac{\text{R}^4}{\text{represents radicals of the formula}}$

<u>or</u>

represents phenyl which is optionally substituted, up to 3 times, identically or differently, by halogen, (C₁-C₆)-alkoxy or hydroxyl or by a radical of the formula

or by (C_1-C_6) -alkyl which, for its part, can be substituted by hydroxyl or (C_1-C_6) -alkoxy,

<u>or</u>

R³ and R⁴, together with the nitrogen atom to which they are bonded, form a radical of the formula

$$-N$$
 $N-R^{13}$ $-N$ R^{16} R^{15} , $-N$,

in which

R¹³ denotes hydrogen, (C_1-C_6) -alkoxycarbonyl, (C_3-C_6) -cycloalkyl, pyridyl, pyrimidyl or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl,

 R^{14} and R^{15} are identical or different and denote hydrogen, hydroxyl or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl or by a radical of the formula – $P(O)(OR^{18})(OR^{19})$.

in which

R¹⁸ and R¹⁹ are identical or different and denote hydrogen or (C₁-C₆)-alkyl,

<u>or</u>

 R^{14} and R^{15} together form a radical of the formula =N-OH,

 R^{16} and R^{17} are identical or different and denote hydrogen or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl,

and the salts, N-oxides and isomeric forms thereof.

- 19. (Cancelled).
- 20. (Currently amended) The use method as elaimed in one of claims 14 to 19 of claim 15, eharacterized in that the medicaments or compositions are wherein the compound is administered intravenously or orally.

New Claims for Attorney Docket Number LeA 34 125C1

- 21. (New) The method of claim 16, wherein the compound is administered intravenously or orally.
- 22. (New) The method of claim 17, wherein the compound is administered intravenously or orally.
- 23. (New) The method of claim 18, wherein the compound is administered intravenously or orally.